

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Alan S. Newell
332 Woodworth Ave.
Missoula, MT 59801
2. Type of action: Application For Beneficial Water Use Permit No. 76K 30042646
3. Water source name: Swan River (Cygnets Lake)
4. Location affected by project: SWNW Section 13, T19N R17W, Missoula County
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

Alan S. Newell submitted an Application For Beneficial Water User Permit to DNRC requesting an appropriation of 10 gallons per minute (gpm) up to 1 acre-feet of water per year from Cygnets Lake for domestic purposes. Cygnets Lake is a tributary to the Swan River. The applicant proposes to divert water using a 1/2 hp pump placed in the lake. Water will be conveyed to the place of use via a two inch flexible pipeline. The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)

Montana Historical Society	Cultural Resource File Search
Montana Natural Heritage Program	Species of Concern
Montana Department of Fish, Wildlife and Parks	2005 Dewatered Stream List
Montana Department of Environmental Quality	303(d) list of impaired streams

Part II. Environmental Review

1. **Environmental Impact Checklist:**

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Cygnnet Lake and the Swan River are not listed on the 2005 Department of Fish, Wildlife and Parks Impaired Stream List. The appropriation of 10 gpm up to 1 acre-feet of water from Cygnnet Lake will not cause or worsen dewatering in the Swan River basin. The applicant will use the water for domestic purposes in a 720 square foot cabin that has two sinks, one toilet and one shower. The cabin utilizes a septic tank and drain field to treat waste water, and the majority of the water diverted for domestic use will return to the source via the waste treatment system. The actual consumptive use will be far less than the 1 acre-foot applied for by the applicant.

Determination: No impact.

Water quality - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

The Department of Environmental Quality has not assessed water quality in Cygnnet Lake or the Swan River from Cygnnet Lake to Swan Lake. The minimal withdraw of water requested by the applicant will not result in impairment of water quality. The applicant will treat waste water with an on-site septic system and drain field. Septic discharge can be a source of groundwater contamination resulting in elevated levels of nitrogen and nitrates.

Determination: No significant impact.

Groundwater - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: N/A

DIVERSION WORKS - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

The proposed diversion will consist of a pump intake valve placed directly in Cygnnet Lake along the applicant's shoreline. Water will be conveyed to the place of use via 2 inch diameter poly-pipeline. The placement of the pump intake valve on the lake bed will not cause any channel impacts or flow modifications in Cygnnet Lake. The use of a pump in a lake for domestic water supply will not create any barriers to fish migration. The construction of the water supply system may require trenching to bury the pipeline up to the shore line. This may cause a temporary disturbance to riparian vegetation, if it exists, on the applicant's property. This disturbance would be small in size, limited to construction of the trench and back filling. The project does not involve a dam or well.

Determination: No significant impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any “species of special concern,” or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or “species of special concern.”

The Montana Natural Heritage Program was contacted to determine if there are any threatened or endangered fish, wildlife, plants or aquatic species or any “species of special concern”, that could be impacted by the proposed project.

The Montana Natural Heritage Program identified the following animal species, Gray Wolf, Canadian Lynx, Grizzly Bear, Wolverine, Fisher, Common Loon, Western Toad, Bull Trout, and Cutthroat Trout occurring within the vicinity of Township 19 North, Range 17 West, Missoula County. In addition, the following sensitive plant species were also identified; Adder's Tongue, Water Howellia, English Sundew and Blunt-leaved Pondweed.

The location of the proposed appropriation is on the western shore of Cygnet Lake in Section 13. This part of the lake shore is developed with summer and full time residences. Any impacts to sensitive mammal species such as gray wolf, lynx and grizzly bear most likely has already occurred. Plant species may be impaired if they are located on the applicant's property and in the path of the trench and buried pipeline. It is not known whether these plants exist on the applicant's property.

Determination: No significant impact.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: N/A project does not involve wetlands.

Ponds - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: N/A project does not involve ponds.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

The use of water from Cygnet Lake for domestic and lawn and garden irrigation will not cause degradation of soil quality or stability. The soils at Cygnet Lake are not susceptible to saline seep.

Determination: No impact.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Existing vegetative cover may be disturbed during installation of the pipeline. The project is located entirely on private property, and the applicants will be responsible for controlling noxious weeds.

Determination: No impact.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Adverse air quality impacts from increased air pollutants are not expected as a result of this project. The water will be diverted using a submersed electric pump. No air pollutants were identified as resulting from the applicant's proposed use of Cygnet Lake for domestic and lawn and garden purposes

Determination: No impact.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.*

The Montana Historical Society indicates no historical or archaeological sites are inventoried in the area. As long as there is no disturbance or alteration to structures over fifty years of age there is a low likelihood cultural properties will be impacted.

Determination: No impact.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

All impacts to land, water, and energy have been identified and no further impacts are anticipated.

Determination: No impact.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

The project is located in an area with no locally adopted environmental plans

Determination: No impact.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

The proposed project will not inhibit, alter or impair access to the present recreational opportunities in the area. The project is not expected to create any significant pollution, noise, or traffic congestion in the area that may alter the quality of recreational opportunities.

Determination: No impact.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

The project does not pose a significant risk to the human health.

Determination: No impact.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes ___ No **XX** *If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

Determination: No impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? None identified.
- (b) Local and state tax base and tax revenues? None identified.
- (c) Existing land uses? None identified.
- (d) Quantity and distribution of employment? None identified.
- (e) Distribution and density of population and housing? None identified.
- (f) Demands for government services? None identified.
- (g) Industrial and commercial activity? None identified.
- (h) Utilities? None identified.
- (i) Transportation? None identified.
- (j) Safety? None identified.

2. ***Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts None identified.

Cumulative Impacts None identified.

3. ***Describe any mitigation/stipulation measures:***

No reasonable alternatives were identified in the EA.

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:***

PART III. Conclusion

1. ***Preferred Alternative*** None identified.

2 ***Comments and Responses***

3. ***Finding:***

Yes___ No **XX** Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

AN EA IS THE APPROPRIATE LEVEL OF ANALYSIS FOR THE PROPOSED ACTION BECAUSE NO SIGNIFICANT IMPACTS WERE IDENTIFIED.

Name of person(s) responsible for preparation of EA:

Name: Jim Nave

Title: Water Resource Specialist

Date: October 24, 2008